

249

DEPARTMENT OF THE NAVY
NORTHERN DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
PHILADELPHIA, PENNSYLVANIA 19112

TELEPHONE NO
(215) 755-4972

114/128S/GWW

18 NOV 1980

U. S. Environmental Protection Agency
Region V
RCRA Activities
P. O. Box 7861
Chicago, IL 60680

EPA Region 5 Records Ctr.



380873

Gentlemen:

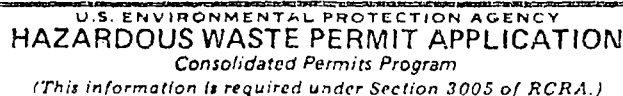
Enclosed are the applications for Hazardous Waste Permits
for Naval Weapons Support Center, Crane, IN and Naval Air
Station, Glenview, IL.

Sincerely,

M. BORETSKY, P.E.

Head, Environmental Engineering Section
By direction of the Commanding Officer

Copy to: (w/o encl)
NWSC Crane
NAS Glenview



L. EPA I.D. NUMBER

FIN	17002350
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OFFICIAL USE ONLY

DATE RECEIVED
(if not a day)

COMMENTS

1. FIRST OR REVISED APPLICATION

Place an "X" in the appropriate box in A or B below (mark one box only) to indicate whether this is the first application you are submitting for your facility's revised application. If this is your first application and you already know your facility's EPA I.D. Number, or if this is a revised application, enter your facility's EPA I.D. Number in Item I above.

A. FIRST APPLICATION (place an "X" below and provide the appropriate date)

☐ 2. NEW FACILITY (Complete item below
FOR NEW FACIL

FOR NEW FACILITIES, PROVIDE THE DATE (yr., mo., & day) OF CONSTRUCTION BEGAN OR EXPECTED TO BE

C	YR.	MO.	DAY
8	4 1	0 1	2 7
15	23 24	25 26	27 28

FOR EXISTING FACILITIES, PROVIDE THE DATE (yr., mo., & day)
OPERATION BEGAN OR THE DATE CONSTRUCTION COMMENCED
(use the boxes to the left)

YR.		MO.		DAY	
73	74	75	76	77	78

B. REVISED APPLICATION (place an "X" below and complete Item I above)

☐ 2. FACILITY HAS A RCRA PERMIT

III. PROCESSES – CODES AND DESIGN CAPACITIES

A. **PROCESS CODE** – Enter the code from the list of process codes below that best describes each process to be used at the facility. Ten lines are provided for entering codes. If more lines are needed, enter the code(s) in the space provided. If a process will be used that is not included in the list of codes below, describe the process (including its design capacity) in the space provided on the form (Item III-C).

B. PROCESS DESIGN CAPACITY — For each code entered in column A enter the capacity of the process.

1. **AMOUNT** – Enter the amount.

2. **UNIT OF MEASURE** – For each amount entered in column B(1), enter the code from the list of unit measure codes below that describes the unit of measure used. Only the units of measure that are listed below should be used.

PROCESS	PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
<u>Storage:</u>		
CONTAINER (barrel, drum, etc.)	S01	GALLONS OR LITERS
TANK	S02	GALLONS OR LITERS
WASTE PILE	S03	CUBIC YARDS OR CUBIC METERS
SURFACE IMPOUNDMENT	S04	GALLONS OR LITERS

<u>Disposal:</u>	
INJECTION WELL	D79 GALLONS OR LITERS
LANDFILL	D80 ACRE-FEET (the volume that would cover one acre to a depth of one foot) OR HECTARE-METER
LAND APPLICATION	D81 ACRES OR HECTARES
OCEAN DISPOSAL	D82 GALLONS PER DAY OR LITERS PER DAY
SURFACE IMPOUNDMENT	D83 GALLONS OR LITERS

Treatment:
TANK
SURFACE IMPOUNDMENT
INCINERATOR

OTHER (Use for physical, chemical, thermal or biological treatment processes not occurring in tanks, surface impoundments or incinerators. Describe the processes in the space provided; Item III-C.)

PROCESS CODE	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
T01	GALLONS PER DAY OR LITERS PER DAY
T02	GALLONS PER DAY OR LITERS PER DAY
T03	TONS PER HOUR OR METRIC TONS PER HOUR; GALLONS PER HOUR OR LITERS PER HOUR
T04	GALLONS PER DAY OR LITERS PER DAY

UNIT OF MEASURE	UNIT OF MEASURE CODE
GALLONS	G
LITERS	L
CUBIC YARDS	Y
CUBIC METERS	M
GALLONS PER DAY	U

UNIT OF MEASURE	UNIT OF MEASURE CODE
LITERS PER DAY	V
TONS PER HOUR	D
METRIC TONS PER HOUR	W
GALLONS PER HOUR	E
LITERS PER HOUR	H

UNIT OF MEASURE	UNIT OF MEASURE	MEASURE	CODE
ACRE-FEET.			F
HECTARE-METER.			F
ACRES.			A
HECTARES.			A

EXAMPLE FOR COMPLETING ITEM III (shown in line numbers X-1 and X-2 below): A facility has two storage tanks, one tank can hold 200 gallons and the other can hold 400 gallons. The facility also has an incinerator that can burn up to 20 gallons per hour.

C		DUP										T/A C									
1		13 14 15										16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31									
LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY				FOR OFFICIAL USE ONLY	LINE NUMBER	A. PROCESS CODE (from list above)	B. PROCESS DESIGN CAPACITY				FOR OFFICIAL USE ONLY								
		1. AMOUNT (specify)	2. UNIT OF MEASURE (enter code)						1. AMOUNT	2. UNIT OF MEASURE (enter code)											
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						
X-1	S 0 2	600				G	5	T 0 4	72,000				U								
X-2	T 0 3	20				E	6	T 0 4	0.2				D								
1	S 0 1	16,000				G	7	T 0 4	0.03				D								
2	S 0 2	28,000				G	8	D 3 0	0.02				A								
3	T 0 1	24,000				U	9														
4	T 0 3	2				D	10														

249

Waste (enter from page 1)

FOR OFFICIAL USE ONLY

0023500

DUP

LIST OF HAZARDOUS WASTES (continued)

WASTE NO. (enter code)	B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEAS- URE (enter code)	D. PROCESSES			
			1. PROCESS CODES (enter)		2. PROCESS DESCRIPTION (if a code is not entered in D(1))	
1 F 0 0 1	1.5	T	S	0	1	
2 F 0 0 2	1.0	T	S	0	1	
3 U 2 2 8						Included with the above
4 F 0 0 3	400	P	S	0	1	
5 F 0 0 5	3.8	T	S	0	1	
6 F 0 0 6	3.6	T	S	0	1	
7 F 0 0 7	165,000	T	T	0	1 S 0 1	
8 F 0 0 9						Included with the above
9 P 0 3 0						Included with the above
10 F 0 0 8	100	P	S	0	1	
11 K 0 4 4	150	T	T	0	4	Open burning
12 K 0 4 5	9	T	T	0	4	Open burning
13 K 0 4 6	44.2	T	S	0	1	
14 K 0 4 7	57,600	T	T	0	4	Carbon adsorption
15 F 0 1 7	52 ?	T	S	0	1	
16 U 2 3 9						Included with the above
17 F 0 1 8	50.4 ?	T	T	0	1	
18 P 0 0 9	28	T	T	0	4	Open burning
19 P 0 1 5	100	P	S	0	1	
20 U 0 0 2	260	P	S	0	1	
21 U 0 4 4	216	P	S	0	1	
22 U 0 7 7	125	P	S	0	1	
23 U 1 5 4	4	T	S	0	1	
24 U 2 3 8	220	P	S	0	1	
25 U 2 2 0	260	P	S	0	1	
26 U 1 3 4	12	P	S	0	1	

mistake
 should be P
 mistake
 should be S01

Do not complete this page before completing if you have more than 26 wastes to list.

Waste # (enter from page 1)
70023500

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W DUP
VIA C 2 DUP

DESCRIPTION OF HAZARDOUS WASTES (continued)

EPA HAZARD. WASTE NO. (4-digit code)				B. ESTIMATED ANNUAL QUANTITY OF WASTE	C. UNIT OF MEAS- URE (enter code)	1. PROCESS CODES (enter)								D. PROCESSES 2. PROCESS DESCRIPTION (if a code is not entered in D(1))	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
D	0	0	1		17	T	S	0	1						
D	0	0	0												Included with the above
D	0	0	2		22	T	S	0	1	T	0	1			
D	0	0	0												Included with the above
D	0	0	3		3800	T	T	0	3	T	0	4	S	0	1
D	0	0	0		16.2	T	S	0	1	D	6	0			

EPA I.D. NO. (enter from page 1)

170023500

V. FACILITY DRAWING

All existing facilities must include in the space provided on page 5 a scale drawing of the facility (see instructions for more detail). Enclosure 7.

VI. PHOTOGRAPHS

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures, existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail). Enclosure 8.

VII. FACILITY GEOGRAPHIC LOCATION

LATITUDE (degrees, minutes, & seconds)

38 50 00 00

LONGITUDE (degrees, minutes, & seconds)

086 50 00 00

VIII. FACILITY OWNER

A. If the facility owner is also the facility operator as listed in Section VIII on Form 1, "General Information", punch an X in the box to the left and skip to Section IX below.

B. If the facility owner is not the facility operator as listed in Section VIII on Form 1, complete the following items:

1. NAME OF FACILITY'S LEGAL OWNER

2. PHONE NO. (area code & no.)

3. STREET OR P.O. BOX

4. CITY OR TOWN

5. ST.

6. ZIP CODE

IX. OWNER CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)
J. P. SWISTOCK
CDR. CEC, USN
Public Works Officer

B. SIGNATURE

John K. Swistock

C. DATE SIGNED

3/27/80

X. OPERATOR CERTIFICATION

I certify that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME (print or type)

B. SIGNATURE

C. DATE SIGNED

NG (see page 4)

losures (5), (6) and (7). See photographs for enclosure (8).

X. Existing Environmental Permits: (Continued from Environmental Protection Agency (EPA) Form 3510-1, Item X.)

1. National Pollution Discharge Elimination System (NPDES) permit for discharge to Boggs Creek: Proposed permit #0035157 was given public notice on 30 July 1980 under Indiana Stream Pollution Control Board Public Notice 51-3131R. The State is allowing Crane interim status while the permit is pending.

2. Application for a permit to operate a sanitary landfill on location was submitted by Naval Weapons Support Center (NAWPN SUPPCEN) Crane to the Indiana State Board of Health on 29 January 1980. The State is currently reviewing the application while allowing Crane interim status to operate.

3. Application for Air Pollution Control Board Permit to operate the Building 146 Demilitarization Incinerator was submitted to the Indiana State Board of Health on 28 November 1979. The State is reviewing the application while allowing Crane interim status to operate.

4. Construction permits were received by the Indiana State Board of Health for the treatment facilities for Building 104 under Approval 1365, Project I-0404 and for Buildings 136 and 160 under Approval 1368, Project I-0408. These permits were issued by the Stream Pollution Control Board.

5. Sludge disposal permit for zinc, cadmium, iron hydroxide sludge for Midwest Laboratories to dispose in Four County Landfill, Fulton County, Indiana, Indiana State operating permit #25-2.

XII. NATURE OF BUSINESS

Mission: The NAWPN SUPPCEN Crane is situated on a 62,463-acre tract of land in southwest Indiana. It is located in the northern portion of Martin County and extends into neighboring Daviess, Greene and Lawrence Counties.

Crane's mission is to "provide material, technical and logistic support to the Navy for ships and crafts equipment, shipboard weapons systems, and assigned expendable and nonexpendable ordnance items; to perform additional functions as directed by the Commander, Naval Sea Systems Command". Under the Single Service Management Program, a segment of the Center's mission includes support of the Crane Army Ammunition Activity (CAAA). This Army activity is tasked with the production and renovation of conventional ammunition and related items; the performance of manufacturing, engineering and product quality assurance to support production; and the storage, shipment and/or demilitarization and disposal of conventional ammunition and related components.

— Approximately 3,200 people are employed at Crane. Of these, about 700 personnel work for the Army. The Center engages these people in a variety of processes and functions to accomplish the missions of the Navy and Army. A tremendous assortment and volume of hazardous materials are used for this purpose. Consequently, a variety of hazardous wastes are produced on-Center. These wastes are stored, treated and/or disposed of by Crane.

FACILITY IDENTIFICATION
EPA FORM 3510-1, ITEM XI

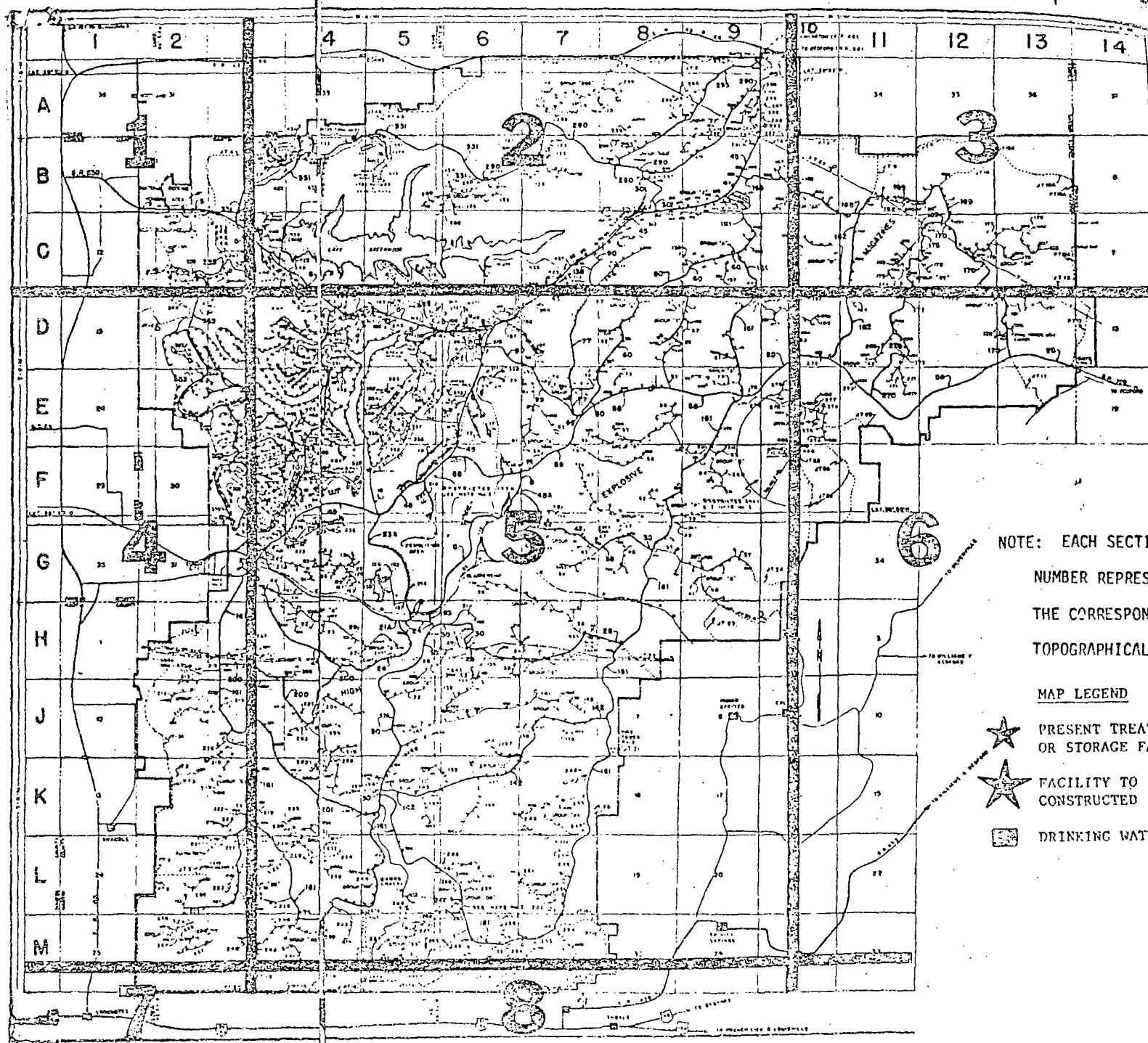
The following table illustrates the functions of the facilities numbered on the topographic maps 1 through 8 (enclosure (3)). Hazardous waste management facilities are identified as HWF. A B prefacing the number indicates the representative Center building numbers. Facilities to be constructed in FY 81-82 are indicated by TBC.

NUMBER	FACILITY	TREATMENT	FUNCTION STORAGE	DISPOSAL
B 2993	Storage		HWF	
150-N	Central Waste Oil Collection Tank		HWF	
B 7	Train Shed Waste Oil Tank		X	
B 1818	Garage Waste Oil Tanks		X	
B 1820	Garage Waste Oil Tank		X	
B 36	Battery Shop ?	HWF		
B 146	Demilitarization Incinerators	HWF		
B 3064	Plating Shop Treatment Plant	HWF		
B 3044	TNT Treatment Plant	HWF		
B 3049	Sewage Treatment Plant	XID		
B 104	Industrial Treatment Plant	TBC		
B 160	Demilitarization TNT Treatment Plant	TBC		
B 136	Lead Azide Treatment Plant	TBC		
	Burning Grounds	HWF		
	Demolition Area			HWF
	Landfill			X

Drinking water wells are numbered 1-8 on the topographical maps and are identified as illustrated in the map legend.

ID Intake and discharge facility. All other treatment facilities discharge into the sanitary sewer system.

Enclosure (2)



Facilities are available from Disaster Preparedness and the Public Works Department for personnel decontamination. Showers and cleaning equipment can be assembled if needed on-site.

The Center laundry can provide cleaning of water washable clothing.

Disaster Preparedness has a mobile communication van with self-contained generators for 110-volt power. The van is equipped with two-way radios on the frequencies used for mobile communications on-Center, citizens band and shortwave. Many vehicles assigned to the departments are equipped with two-way radios and portable hand held units are available in Public Works and other departments and can be used for reporting observations in areas remote from a road.

6.0 DISPOSAL. A disposal contract for hazardous waste hauling and chemical disposal is in effect with a permitted waste hauler.

The hauler provides Department of Transportation specified containers for hazardous materials. Filled containers are picked up by the hauler and carried to a permitted disposal site.

Waste material generated in a spill cleanup will be submitted to the contracted hazardous waste hauler. Storage on the Center for hazardous waste is at Building 2993 and is picked up at this location by the waste hauler.

7.0 DOCUMENTATION AND COST ACCOUNTING. The OSC will maintain a log of all activities related to the spill with times and locations noted in detail. A hand held recorder is ideal for noting details under field conditions where hand writing of notes is slow and cumbersome and may cause loss of pertinent details.

Cost accounting will be handled by the Center charge number and accounting system. This system provides separate accounting of labor and material.

8.0 MATERIALS AND LOCATIONS. Details of the spill prevention systems and countermeasures in place at hazardous material handling and storage areas are presented in the Spill Prevention, Control and Countermeasures Plan for NAVWPNSUPPCEN Crane.

This listing of materials and locations is intended to provide guidance for response in the event of a spill of hazardous materials at Crane.

8.1 Fuel Tanks. See Appendix III for a detailed list of locations, capacities and fuel types. Fuels stored include No. 1, 2 and 6 fuel oil, No. 2 diesel, JP-5, gasoline, and gasohol.

Spills involving fuels should be quickly evaluated for the possibility of fuel flowing into drains or under buildings and rapid action taken to contain it. The Fire Division should respond because of the flammability of fuels. Spills may be contained by spreading absorbent material such as sand or diking with sand or soil. It may be advisable to cover the spill with foam or dispersant to reduce evaporation and fire hazard. Personnel not essential to the cleanup should be immediately evacuated from the area because of fire hazard.

8.2 Fuel Dispensing Pumps. Pumps for fueling vehicles are located at Buildings 3, 9, 1838, and 2984. Gasohol and diesel fuel are dispensed at Building 3 and gasoline is dispensed at Buildings 9, 1838 and 2984.

8.3 Waste Lubricating Oil. Waste oil is collected and stored in the following sites:

Central Storage, 25,000-gallon, north of Building 150
 1,000-gallon, Building 7
 2-500-gallon, Building 1818
 500-gallon, Building 1820

These tanks are underground with capped pipe openings to the surface for filling and emptying. Spills may occur when transferring from collection tanks to central storage or when pouring oil from catch pans to collection tanks. Absorbents such as sand can be used for collection of spills and detergents and dispersants used to disperse oil if required.

8.4 Hazardous Waste - Building 2993. Hazardous wastes generated at Crane are stored at Building 2993 while awaiting pick up by the contractor for hazardous waste hauling and disposal. Electric transformers containing PCB's are also stored in the building.

Personnel protection would be necessary in this area when cleaning up a spill. Chemical resistant rubber boots, gloves and coveralls would be the minimum protection with an air pack available outside the building. The doors should be opened at both ends of the building to provide maximum ventilation.

If the spill involves oils from the transformers containing PCB's, the oil should be removed completely. If any soil is contaminated, the soil should be removed to a depth below the penetration level of the oil. All contaminated waste should be placed in barrels and implements used for picking up material cleaned and the resulting waste placed in barrels. The barrels should be secured and clearly marked with PCB labels. PCB labels are available from the Public Works EPM.

If acids are spilled, the area should be neutralized with soda ash and flushed with water if necessary. If bases are spilled, the area should be neutralized with sodium hydrogen phosphate and flushed with water if necessary.

8.5 FS Smoke Storage - Building 1816. FS smoke is a mixture of chloro-sulfonic acid and sulfur trioxide. Upon exposure to moisture, even that in the air, it forms dense clouds of condensed droplets of hydrochloric and sulfuric acid and is extremely corrosive. The liquid mixture reacts violently with liquid water and releases a great amount of heat. No water should be applied before the liquid is neutralized. Personnel should wear chemical resistant boots, gloves and masks suitable for protection from acid mists. Clothing should be acid resistant or rubber aprons should be worn. FS smoke liquid will rapidly destroy cotton and most synthetic fabrics and cause severe burns if it contacts the skin. Personnel contaminated with FS smoke should be immediately flushed with large quantities of water and given medical attention.

As smoke can be neutralized by covering the spill with soda ash or crushed limestone. The material is stored in 55-gallon drums and it is highly unlikely that a large quantity could spill at one time, but caution should be exercised when handling drums since they may be weakened by corrosion.

8.6 Rockeye Water Treatment - Building 3044. The process water from the Rockeye production facility is treated at Building 3044 to remove wax, explosive (TNT, RDX) and particulate. The water is saturated with explosive (very low concentration because of low solubility of explosive in water). The primary hazard is the contamination of the streams in the vicinity of the facility. The water is recycled but there is a large quantity in the system, several thousand gallons, and would introduce a large quantity of TNT into the area surrounding the facility, if spilled.

Immediate action should be taken to stop the flow in case of a spill and to dam the flow with earthen dams and collect the water for treatment. Personnel should wear rubber boots to avoid contact with the contaminated water.

8.7 Flammable Liquid Storage - Building 2059. The Supply Department maintains stores of flammable solvents and paints in Building 2059. These include oils, greases, acetone, ethyl alcohol, various paints and solvents. The largest unit held is 55 gallons and the threat of a quantity spill is remote. The greatest danger is fire hazard and the Fire Department should respond if there is any indication of release of a low flash point material such as acetone. Thorough ventilation of the building should be accomplished before personnel enter and an air mask should be available for use in case of a contaminated atmosphere.

The spill should be absorbed with suitable absorbent and the contaminated absorbent packed in 55-gallon drums.

8.8 Compressed Gas Storage - Building 49. The Supply Department maintains stores of compressed gases at Building 49. There are flammable gases such as hydrogen and acetylene, oxidizers such as oxygen and nitrous oxide and other gases of varying degrees of hazard.

Release of compressed gas or a fire in the vicinity of compressed gases is best handled by specialists. Evacuation of personnel from the area is mandatory if a fire occurs in the area of the compressed gas storage. Due to the extreme hazard involved the indicated action is to secure the area and watch from a safe distance until the hazard abates by itself.

8.9 Acid Neutralization - Building 36. Sulfuric acid from lift truck batteries is emptied into a concrete pit outside the building and neutralized. The pit is below ground level and is connected to the sewer by a manually operated valve.

A spill could occur onto the ground while a battery is being emptied. The area should be neutralized with soda ash and flushed with water to remove the salts. Another possibility is releasing of acid into the sewer. Sufficient soda ash should be flushed into the sewer to neutralize the acid and a large volume of water flushed into the sewer to dilute the salts.

Personnel should wear eye protection and acid resistant gloves and boots.

8.10 Chemical Storage -- Building 2896. Acids, bases, solvents, and various other chemicals are stored in Building 2896. The building is diked and compartmentalized with many containers stored in separate cabinets segregated by type. A spill in this building would flow outside to the ground. Containers are no larger than 55 gallons. A spill of a quantity greater than the largest container is improbable.

Clean up of a spill would require flushing of the building area affected, appropriate neutralization of acids or bases with soda ash or sodium hydrogen phosphate and collection and containerization of contaminated soil, in drums. Some of the chemicals stored are used in plating baths and contain heavy metals which would require clean up after the pH is adjusted to minimize the corrosivity of the spilled material.

Personnel should wear chemical resistant rubber boots, gloves and coveralls. The building should be thoroughly ventilated before entering and self-contained breathing apparatus should be available outside if needed. Face masks with appropriate filters should be used if volatile solvents or chemicals are spilled.

8.11 Plating Baths -- Building 2906. Tanks containing heavy metals such as gold, silver and copper in acidic and basic solutions are used in Building 2906. The tanks have capacities of 50-100 gallons. There is approximately 1000 gallons total quantity. The tanks are located in a room with floor drainage to the sewer. A spill would probably enter the sewer and would require neutralization of solutions with soda ash or sodium hydrogen phosphate and flushing with large quantities of water to dilute the salts.

Personnel should wear chemical resistant boots, gloves and coveralls.

8.12 Plating Baths -- Building 1884. The CAAA industrial shops maintain facilities for metal cleaning and plating in Building 1884. There are a number of tanks containing acidic and basic solutions. The tanks also contain heavy metals, chromates and cyanide. Normally, any spill inside the building would flow to sumps which are connected to a system which collects the outflow from the building and pumps it to a treatment facility which removes contaminants before discharge to the sewer.

It is possible that a spill of several hundred gallons of solution onto the floor in a short period of time would allow some material to escape outside onto the ground. When investigating and cleaning spills, personnel should wear chemical resistant boots, gloves and coveralls and self-contained breathing apparatus if any chance exists that cyanide solution may have spilled. If the cyanide solution mixes with an acidic solution, very toxic hydrogen cyanide gas would be released. If cyanide solution has spilled, it should be treated with sodium hypochlorite to neutralize the cyanide hazard. High test hypochlorite (HTH) is available on the Center from the EOD Team or Disaster Preparedness. HTH should be handled carefully, it is a strong oxidizer and destroys organic material such as cotton or synthetic fabrics and

causes burns to the skin. Personnel should wear rubber gloves, boots and aprons when handling HTH. The area should be neutralized further with soda ash or sodium hydrogen phosphate and flushed with large quantities of water to dilute the salts.

8.13 Plating Waste Treatment - Building 3064. Effluent from the CAAA plating shop is treated at Building 3064. The system is closed and only discharges treated water to the sewer. Some of the treatment tanks are below ground with normally closed valves on sewer connections. If the contents of the tanks should enter the sewer, appropriate compounds, stored at Building 3064 should be added to the sewer to neutralize the discharge. Sulfuric acid and sodium hydroxide are available. If there is a spill of material in the building, the building floor drains all lead to the treatment tanks and spills should be flushed to the tanks.

8.14 Pest Control - Building 2189. All pesticides used on-Center are stored at Building 2189. See Appendix IV for a listing of types and quantities.

Spills of pesticides require cautious handling. Analysis of samples of the spill may be necessary to accurately determine the identity. Personnel should assume high toxicity if not certain. Chemical resistant gloves, boots and coveralls should be worn and full coverage impervious gear may be necessary if personnel will have any risk of significant contact with spilled material.

Some pesticides can be neutralized by application of sodium hypochlorite or HTH. All material used in clean up of nonneutralized spill should be placed in waste drums and secured. Information useful for clean up of pesticide spills may be obtained from CHEMTREC ((800) 424-9300), Northern Division, Naval Facilities Engineering Command ((215) 755-3656) or the EPA ((312) 353-2212). It is very helpful to know the EPA registration number when seeking assistance.

8.15 Acid Storage - Building 2748. Acids such as sulfuric, hydrochloric and nitric are stored in glass and plastic carboys at Building 2748.

Personnel should wear acid resistant gloves, boots and coveralls and eye protection such as chemical goggles. Face masks with appropriate filters would be necessary if hydrochloric or nitric acid is spilled because of corrosive vapors.

Neutralization can be effected with soda ash or crushed limestone. The area should be flushed with water to remove salts.

8.16 Explosives. Bulk explosives are stored on-Center in large quantities. The handling of explosives is rigidly controlled and closely monitored. Storage is in secured, weatherproof buildings. No water soluble explosives are in use and those in use are solids and do not constitute a hazard by dispersion into the environment. Spills of these materials would be handled by personnel from EOD (extension 1598) and the Crane Army Ammunition Activity's Explosive Disposal Group (extension 1317).

9.0 GENERAL CONSIDERATIONS. In addition to static locations such as storage sites and industrial areas, there are other possible sources of spills. Fuels are distributed on-Center from the Tank Farm or delivered by private contractors. If a spill occurs involving a fuel tanker truck, the Fire Division should respond to assist and provide fire protection. The spilled material should be contained with dikes, sandbags, etc., and the leak plugged if possible. Wooden plugs may slow the flow so that a catch basin can contain spillage.

If material spills into streams and cannot be contained, assistance should be obtained from sources with capability. The Indiana Stream Pollution Control Board Emergency Response Section ((317) 633-0682 weekdays or (317) 633-0144 other times) may be able to suggest a source of assistance and should be contacted.

APPENDIX I

DISASTER PREPAREDNESS
OIL AND HAZARDOUS SUBSTANCES
SPILL CONTINGENCY PLAN
AND
OIL AND HAZARDOUS SUBSTANCES
RESPONSE PLAN FOR NAVWPNSUPPCEN CRANE
(3-76)

DISASTER PREPAREDNESS OPERATION PLAN
NAVWPNSUPPCEN CRANE DP OPLAN 3-76

APPENDIX VIII TO ANNEX G

OIL AND HAZARDOUS SUBSTANCES SPILLS

- References: (a) 9NDINST 6240.2B, Subj: Contingency plans for oil and hazardous substances spills in the navigable waters of the Ninth Naval District
(b) OPNAVINST 6240.3D
(c) NAVFACINST 6240.2A

1. Purpose. To develop and maintain an effective and comprehensive contingency plan, for responding to oil and hazardous substance spills in support of reference (a).

2. Discussion

a. The area of responsibility for coordination includes the Wabash River, the Ohio River and Lake Michigan. The mission of this Command is coordination and support to Commands within the area of coordination responsibility.

b. "The Navy's largest, single, pollution abatement problem is oil."

c. "Responsible commanders need not be overly concerned about the details of oil spill definitions, in as much as the Navy is committed to responsive actions on all oil spills regardless of size."

d. "In general, the ship or shore activity causing an oil spill is responsible for the resources expended in clean-up."

3. Contingency Support. The Commandant, Ninth Naval District has a formal agreement with the Commander, Ninth Coast Guard District which provides for Coast Guard support in the event of a Navy caused spill within the Great Lakes area of the Ninth Naval District. The agreement includes Coast Guard action up to and including taking charge of and directing corrective action to clean-up discharges emanating from U.S. Navy vessels or facilities. Coast Guard resources utilized will be reimbursed by Navy funds. This agreement was formalized to insure containment and clean-up of major spills and those spills caused by reserve cruise ships away from Naval installations having spill support capability. The agreement with the Coast Guard in no way relieves the Navy Command causing the spill from the responsibility of preparing appropriate and effective plans and maintaining the full capability to execute the plan in the event of a spill. The request for Coast Guard support under the terms of the agreement will only be executed by the COMNINE Duty Officer.

DISASTER PREPAREDNESS OPERATION PLAN
NAVWPNSUPPCEN CRANE DP OPLAN 3-76

4. On Scene Coordinators (OSC). Each Commanding Officer/Officer In Charge is hereby designated OSC for respective area of cognizance, with the exception that the Commanding officer, Navy Public Works Center is designated OSC for the Great Lakes complex. The OSC responsibilities shall include not only spills on navigable waters, but also land spills. Afloat Commands are pre-designated Navy OSC when vessels are not located at an established Naval shore facility.

5. Response Phases

a. Phase I -- Discovery and Notification. A discharge may be discovered when a report is received from a discharger in accordance with statutory requirements, through deliberate discovery procedures such as vessel patrols, aircraft searches or similar procedures or through random discovery by incidental observations of Government agencies or the general public.

Report from random discovery may be initially through fishing or pleasure boats, police departments, telephone operators, port authorities, news media, etc. Reports generated by random discovery should be reported to the nearest USCG. Reports of major and medium discharges received by either EPA or USCG shall be expeditiously relayed by telephone to the other agency.

b. Phase II -- Evaluation and Initiation of Action. The OSC shall insure that a report of a discharge is immediately investigated. Based on all available information, the OSC shall (1) evaluate the magnitude and severity of the discharge, (2) determine the feasibility of removal and (3) assess the effectiveness of removal actions.

c. Phase III -- Containment and Countermeasures. These are defensive actions to be initiated as soon as possible after discovery and notification of a discharge. These actions may include public health and welfare protection activities, source control procedures, salvage operations, placement of physical barriers to halt or slow the spread of a pollutant, emplacement or activation of booms or barriers to protect specific installations or areas, control of the water discharge from upstream impoundments and the employment of chemicals and other materials to restrain the pollutant and its effects on water related resources.

d. Phase IV -- Clean-up; Mitigation and Disposal. This includes actions taken to recover the pollutant from the water and affected public and private shoreline areas, and monitoring activities to determine the scope and effectiveness of removal actions. Actions that could be taken include the use of absorbers, skimmers and other collection devices for floating pollutants, the use of vacuum dredges or other devices for sunken pollutants; the use of reaeration or other methods to minimize or mitigate damage resulting from dissolved, suspended or emulsified pollutants; or special treatment techniques to protect public water supplies or wildlife resources from continuing damage.

G-VIII-2

APPENDIX IV
LIST OF PESTICIDES STORED
IN BUILDING 2189

Insecticide-Dieldrin (Emulsifiable Concentrate) Hexachloro-Epoxy-Octahydroendo, Exodimethano/Naphthalene 15.0% Aromatic Hydrocarbons 78.4% Inert Emulsifier 4.0% NAVSANDA 9986-1 Edgewater, New Jersey	5-5 gal. cans
Insecticide-Malathion/(Emulsifiable Concentrate) O,O-Dimethyl Phosphero Dithiodate of Diethyl Mercaptosyncinate 57.0% Aromatic Petroleum Solvent 38.0% Inert Ingredients 5.0% EPA #551-131	7-5 gal. cans
Chlordane (Concentrate) Chlordane-Technical 73.6% Petroleum Distillates 22.4% Reg #551-133	2-5 gal. containers
Insecticide-Aerosol D-Phenothrin 2% B-Phenoxybenzyl D-Cis & Trans 2,2-Dimethyl-3,12-Methylpropenyl Cyclopropanecarboxylate 1.92% Other Isomers 0.08% Inert Ingredients 98.00% EPA Reg #901-79	56-12 oz. cans
Larvacide-Mosquitoe (Flitmo) Mineral Oil 98.8%	1-55 gal. drum
Insecticide - Pyrethrin Synergized 0.4% Piperonyl Butoxide 1.6% Deodorized Kerosene 98.0% EPA #6830-39	34-1 gal. cans
Fungicide/Turf (Tersan SP) W/P Chloroneb (1-4-Dichloro-2,5-Dimethoxybenzene) 65.0% Inert Ingredients 35.0% EPA #352-344-AA	3-3 lb. bags
Herbicide Torden Ioir Picloram (4-Amino-3,5,6-Trichloro Picolinic Acid) 5, 4%, 2,4-Dichlorophenoxyacetic Acid 20.9% Reg #464-510	10 gal.
Insecticide-Wasp/Long Range Jet Spray Pyrethrins .10% Piperonyl Butoxide .20% N-Octyl Bicycloheptene Discarboximide .33% O-1 Isopropoxyphenyl Methylcarbamate .50% Petroleum Distillate .87% Inert Ingredients 98.00% EPA Reg #498-74-11377	63-14 oz. cans
Fungicide-Tribasic Bordeaux Powder W/P Copper (in basic copper sulfate) 12.75% Inert Ingredients 87.25%	4 1/2 lb. boxes
Fungicide/Turf (Tersan 1991) W/P Benomyl (Methyl 1-(Butylcarbamoyl))-2-Benzimidazole-Carbamate 50.0% Inert Ingredients 50.0% EPA #352-357-AA	2-2 lb. bags
Herbicide-Betasan 4E (Selective/Preemergence)-S-(O-Diisopropyl Phosphorodithionate of N-(2-Mercaptoethyl) Benzene Sulfonamide 45.2% USDA #476-1817	4-5 gal. cans

Herbicide-Ammate X-NI Ammonium Sulfamate 95% Inert Ingredients 5% EPA #352-311	2-60 lb. bags
Fungicide/Turf (Tersan LSR) W/P Maneb (Manganese Ethylenebis- Dithiocarbamate) 80.0% Inert 20.0% EPA #352-343-AA	32-3 lb. bags
Herbicide-Hyvar X-WS Bromacil (5-Bromo-3-Sec-Butyl-6- Methyluracil 50% Inert Ingredients 50% USDA Reg #352-295	4-50 lb. drums (cardboard)
Herbicide-Tordon 101 Mixture Picloram (4-Amino-3,5,6- Trichloropicolinic Acid) 10.2% 2,4-Dichlorophenoxyacetic Acid as the Tursopropanolamine Salt 39.6% Inert Ingredients 50.2% EPA Reg #464-306	3-5 gal. cans
Herbicide-Ureabor (Soil Sterilant) Sodium Metaborate Tetrahydrate 66.5% Boron Trioxide 22.6% Sodium Chlorate 30.0% Bromacil (5-Bromo-3-Sec-Butyl-6-Methyluracil 1.5% Inert 2.0% EPA #1624-90	11-50 lb. bags, 5,700 lb. total
Herbicide Silvex 4L Isooctylester of Silvex 2-(2,4,5- Trichlorophenoxy Propionic Acid) 65.1% USDA #359-366	220 gal. in 55 gal. drums
Herbicide-Monobor-Chlorate (Soil Sterilant) Sodium Metaborate Tetrahydrate 68.0% Sodium Chlorate 30.0% Boron Trioxide 23.3%	1,500 lb. 5 drums, 3,000 lb. each
Herbicide 2,4,5-Trichloro Phenoxy Acetate 63.0%, Thompson Chemical Co. Manuf.	165 gal. 55 gal. drums
Herbicide 2,4-D, Isoctylester of 2,4-Dichlorophenoxyacetic Acid USDA #359-411	55 gal. in 55 gal. drums
Herbicide Pramital 25E 2,4-Bis (Isopropyl Amino-B-Methoxy- S-Triazine) Reg #100-443	470 gal. in 5 gal. cans
Herbicide-Krovar I 80W/P Bromacil (5-Bromo-3-Sec-Butyl-6- Methyluracil 40.0% Diuron (3-(3,4-Dichloropheny)) 1,1-Dimeth- yurea 40.0% Inert Ingredients 20% EPA #352-352-AA	316-5 lb. bags
Insecticide-Technical Chlordane 40 W/P Technical Chlordane 40.0% Inert Ingredients 60.0%	8-4 lb. bags
Herbicide-Princep 4G Simazine (2-Chloro-4,6-Bisethylamino- S-Triazine) 4.0% Inert Ingredients 96%	4-50 lb. boxes

Fungicide-Zineb 75 Zineb Zinc Ethylenebis (Dithiocarbamate) 75% Inert Ingredients 25%	25-3 lb. bags
Rodenticide-Bait (Anticoagulant Warfarin) Warfarin 3-Alpha-Acetonylbenzyl)-4-Hydroxycoumarin 0.025% Inert Ingredients 99.975%	6-5 lb. cans
Rodenticide-Anticoagulant (Universal Concentrate) Calcium Salt of 2-Pivalyl-1,3-Indandione	24-1 lb. cans
Insecticide-Gardona 75 W/P 2-Chloro-1-(2,4,5-Trichlorophenyl) Vinyl Dimethyl Phosphate 75% Inert 25% USDA #201-195	2-3 lb. bags
Insecticide-Carbaryl 80 W/P Carbaryl (1-Naphthyl Methyl-Carbamate) 80% Inert Ingredients 20% EPA #1016-43	16-10 lb. bags
Insecticide-Diazinon (D-Tox 4E) E7C 0,0-Diethyl-0(2-Isopropyl-4 Methyl 6-Pyrimidinyl) Phosphorothiocate 48.2% Aromatic Petroleum Solvent 41.4% Inert 10.4%	2-1 gal. cans
Insecticide-Resmethrin (5-Benzyl-3-Fory) (Menthyl 2,2-Dimethyl-3-(2-Methylpropenyl) Cyclopropanecarboxylate 1.2% Related Compounds 0.08% Inert Ingredients 98.72% EPA #901-76	36-12 oz. cans
Insecticide-Pyrethrin 0.4% Piperonyl Butoxide 1.4% Deodorized Kerosene 13.0% Inert 85.0% EPA #1783-40	13-12 oz. cans
Growth Retardent Embark 2-5 Diethanolamine Salt of Mefluidide (N-(2,4-Dimethyl-5-Dectrifluoromethyl)-Sulfonyl) (Amino Phenyl Acetamide) 28% Inert Ingredients 72% EPA Reg #7182-7-AA	3-1 gal. cans